

Supplemental Preliminary Amendment
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which said specific lectin or said specific antibody is capable of binding; the method comprising the steps of:

- (a) adding an anti-thyroglobulin antibody reactive with both the specific thyroglobulin and the other thyroglobulin to the sample to form conjugates of the anti-thyroglobulin antibody and all the thyroglobulin in the sample,
- (b) adding said specific lectin or said specific antibody to the sample to form conjugates of said specific lectin or said specific antibody with the specific thyroglobulin conjugates formed in (a), and
- (c) determining the amount of specific thyroglobulin by measuring the amount of the specific thyroglobulin conjugates formed in (b).

C1
wt

21. (Amended) A method for determining both a total amount and an amount of one of two types of thyroglobulin in a fluid sample originating from a living body, the two types of thyroglobulin in the sample being a specific thyroglobulin, which is thyroglobulin having a sugar chain with a specific structure to which a specific lectin or a specific antibody is capable of binding; and other thyroglobulin, which is thyroglobulin having a sugar chain other than the specific sugar chain to which said specific lectin or said specific antibody is capable of binding; the steps comprising:

C2

- (a)(i) adding to the sample said specific lectin or said specific antibody to form conjugates of said specific lectin or said specific antibody with the specific thyroglobulin, and

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(ii) adding to the sample an anti-thyroglobulin antibody reactive with both the specific thyroglobulin and the other thyroglobulin to form conjugates of the anti-thyroglobulin antibody and all the thyroglobulin in the sample including specific thyroglobulin conjugates formed in (a), and

(b)(i) determining a total amount of conjugates formed of the anti-thyroglobulin antibody with both of the specific thyroglobulin and the other thyroglobulin, and

(ii) determining an amount of conjugates formed of said specific lectin or said specific antibody with the specific thyroglobulin,

wherein determining the amount of conjugates formed in (b)(i) corresponds to the total amount of thyroglobulin and determining the amount of conjugates formed in (b)(ii) corresponds to the amount of specific thyroglobulin.

02
22. (Amended) A method for determining malignancy of a thyroid tumor, comprising:

(1) measuring the total amount of thyroglobulin and an amount of one of two types of thyroglobulin in a fluid sample originating from a living body, the two types of thyroglobulin in the sample being a specific thyroglobulin, which is thyroglobulin having a sugar chain with a specific structure to which a specific lectin or a specific antibody is capable of binding; and other thyroglobulin, which is thyroglobulin having a sugar chain other than the specific sugar chain to which said specific lectin or said specific antibody is capable of binding; the steps comprising:

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(a)(i) adding to the sample said specific lectin or said specific antibody to form conjugate-1 of said specific lectin or said specific antibody with the specific thyroglobulin, and

(ii) adding to the sample an anti-thyroglobulin antibody reactive with both the specific thyroglobulin and the other thyroglobulin to form conjugates of the anti-thyroglobulin antibody and all the thyroglobulin in the sample including specific thyroglobulin conjugates formed in (a), and

(b)(i) determining an amount of conjugate-1 formed in step (a)(i) of said specific lectin or said specific antibody with the specific thyroglobulin, and

(ii) determining a total amount of conjugates formed in step (a)(ii) of the anti-thyroglobulin antibody with both of the specific thyroglobulin and the other thyroglobulin, and

(2) determining the malignancy of the thyroid tumor by comparing the calculated ratio with a predetermined ratio from a fluid sample originating from a living body having:

- (i) normal thyroid;
- (ii) benign thyroid; or
- (iii) thyroid carcinoma;

the calculated ratio of the fluid sample originating from a living body having thyroid carcinoma being significantly higher or lower than that of the fluid sample originating from a living body having the normal thyroid or the fluid sample originating from a living body having the benign thyroid.
